



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,910	06/04/2001	Allan Williams	P-001	2026

7590

06/29/2005

Dr. Victoria Donnelly
Hazeldean R.P.O.
P.O. Box 24001
Kanata, ON K2M 2C3
CANADA

EXAMINER

HILLERY, NATHAN

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,910

Applicant(s)

WILLIAMS ET AL.

Examiner

Nathan Hillery

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,7-16,19,21-27 and 37-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7-16,19,21-27 and 37-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/4/01, 10/22/03, 5/18/05</u> | 6) <input type="checkbox"/> Other: _____ |

23

DETAILED ACTION

1. This action is responsive to communications: IDS filed on 5/18/05.
2. Claims 1, 2, 5, 7 – 16, 19, 21 – 27, and 37 – 51 are pending in the case. Claims 1, 12 – 15, 24, 25, 39, 40, 44, 46, and 51 are independent.

Information Disclosure Statement

3. The information disclosure statement filed 6/4/01 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 12, 24, and 44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention amounts to nonfunctional descriptive data stored on computer-readable media. Because the claims simply set forth mere arrangements and/or compilations of data on computer-readable media, the claimed invention is non-statutory.
6. Further, to expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 7, 13, 21, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Regarding dependent claims 7 and 21, it is unclear what applicant means by "the list consisting of ASCII, HTML, SGML, XHTML, and formats."

10. Regarding independent claim 13, it is unclear what applicant means by "repeating the steps (a) to (b) required number of times."

11. Regarding dependent claim 37, it is unclear what applicant means by "comprising only one element inane form."

12. Claim 42 recites the limitation "the interchanged claims" in line 3. There is insufficient antecedent basis for this limitation in the claim. Further, the claim will be interpreted as being substantially similar to its parent and consequently rejected along the same rationale in the rejection(s) under 35 USC 102(e).

13. Claim 45 recites the limitation "transformed claims" in line 2. There is insufficient antecedent basis for this limitation in the claim. Further, the claim will be interpreted as being substantially similar to its parent and consequently rejected along the same rationale in the rejection(s) under 35 USC 102(e).

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1, 2, 5, 7 – 16, 19, 21 – 27, and 37 – 51 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Rivette et al. (US006339767B1).

16. **Regarding independent claim 1**, Rivette et al. teach that *referring again to FIG. 168, further in step 16816, the client 304/306 uses the claims dependency tree 18502 to generate the patent claims hyperbolic tree 17101. In generating the hyperbolic tree, a hyperbolic tree node is generated for each node in the claims dependency tree 18502. Also, links between nodes in the patent claims hyperbolic tree 17101 correspond to links in the claims dependency tree 18502. In addition to linking information, the nodes in the patent claims hyperbolic tree 17101 may also include any claim information that was in the corresponding node of the claims dependency tree 18502, such as claim text. The node type and the sub-type are also stored in the nodes of the patent claims hyperbolic tree 17101. The node type refers to whether or not the node is a patent node (such as node 17104) or a claim node (such as node 17108A). The sub-type refers to whether the node corresponds to an independent claim (such as nodes 17106) or a dependent claim (such as nodes 17108A and 17108B). Further details concerning*

construction of a hyperbolic tree representative of the claims dependency tree 18502 will be apparent to persons skilled in the relevant art(s) (Column 137, lines 10 – 30) and that in step 16822, the client 304/306 retrieves information on the selected claim, such as the text of the selected claim, and displays the claim text. The invention includes a number of formats for displaying the claim text. For example, FIG. 172 illustrates a display format 17202 where the text of the claim is displayed independent of and apart from the patent. In contrast, FIG. 173 illustrates a display format 17302 where the claim is displayed in the context of the patent (Column 137, line 65 – Column 138, line 5),

compare with (a) selecting a claim section of the patent document; (b) processing the claim section, including: (c) extracting claim dependency and text of claims from the claim section; (d) converting the extracted claim dependency into a graphical form, comprising a set of graphical elements, each element corresponding to an individual claim or a group of claims; (e) converting the extracted text of claims into a textual form, comprising a set of elements, each element being a text of an individual claim or a text of a group of claims; (f) forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims, and associating thereof with a computer program providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the claim dependency in the other form to a user; and (g)

forming the derivative document by combining the derivative claim section with the patent document or a part of the patent document.

17. **Regarding dependent claim 2**, Rivette et al. teach that *referring again to FIG. 168, further in step 16816, the client 304/306 uses the claims dependency tree 18502 to generate the patent claims hyperbolic tree 17101. In generating the hyperbolic tree, a hyperbolic tree node is generated for each node in the claims dependency tree 18502. Also, links between nodes in the patent claims hyperbolic tree 17101 correspond to links in the claims dependency tree 18502. In addition to linking information, the nodes in the patent claims hyperbolic tree 17101 may also include any claim information that was in the corresponding node of the claims dependency tree 18502, such as claim text* (Column 137, lines 10 – 20), **compare with the steps of converting further comprises establishing links between the elements of the graphical and textual subsets according to the transformed claim dependency.**

18. **Regarding dependent claims 5 and 8**, Rivette et al. teach that *in step 16822, the client 304/306 retrieves information on the selected claim, such as the text of the selected claim, and displays the claim text. The invention includes a number of formats for displaying the claim text. For example, FIG. 172 illustrates a display format 17202 where the text of the claim is displayed independent of and apart from the patent. In contrast, FIG. 173 illustrates a display format 17302 where the claim is displayed in the context of the patent* (Column 137, line 65 – Column 138, line 5), **compare with displaying the selected subsets of elements on a computer screen; and displaying the selected subsets of elements on a computer screen in combination**

with other elements of the sets; and the step (g) comprises a step selected from the list consisting of: forming the document so that the derivative claim section is replacing the claim section of the patent document; forming the document so that the derivative claim section is supplementing the patent document; forming the document so that derivative claim section is supplemented by a part of the patent document; and forming the document so that the derivative document derivative claim section of the patent document.

19. Regarding dependent claims 7, 9 – 11, and 47, Rivette et al. teach that *Specifically, the enterprise server 314 sends raw data 802 to the web server 310 over the network 312. The translator 804 in the web server 310 translates the raw data 802 to data in the well known HTML data format. This HTML data 806 is sent to the web client 304 over network 308. A browser 808 in the web client 304 renders the HTML data 806. The translator 804 translates data going from the web client 304 to the enterprise server 314 in a similar manner. It is noted that data formats other than HTML could alternatively be used. In particular, any data format used by the browser 808 could alternatively be used in the invention (Column 38, lines 44 – 54), compare with* the step (e) comprises converting into the form selected from the list consisting of ASCII, HTML, SGML, XHTML, and formats; a step of performing one or more of the following: storing data obtained in at least one of the steps in a database; sending data obtained in at least one of the steps over a network; compressing data obtained in at least one of the steps; displaying one of the derivative document and the derivative segment on a computer screen; the step (b)

comprises distributed processing of the patent document in a network environment performed by using processing power of more than one computer; the step of distributed processing comprises the steps initial processing of the document performed on server side and final processing performed on a client side; and the derivative document being presented in a web compatible form such that to be recognized by a browser.

20. **Regarding independent claim 12**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

21. **Regarding independent claim 13**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

22. **Regarding independent claim 14**, the claim incorporates substantially similar subject matter as claim 13, and is rejected along the same rationale.

23. **Regarding independent claim 15**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

24. **Regarding dependent claim 16**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

25. **Regarding dependent claim 19**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

26. **Regarding dependent claim 21**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

27. **Regarding dependent claim 22**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.

28. **Regarding dependent claim 23**, the claim incorporates substantially similar subject matter as claim 11, and is rejected along the same rationale.
29. **Regarding independent claim 24**, the claim incorporates substantially similar subject matter as claim 12, and is rejected along the same rationale.
30. **Regarding independent claim 25**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.
31. **Regarding dependent claim 26**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.
32. **Regarding dependent claim 37**, Rivette et al. teach that *in step 16906, the client 304/306 selects one of the nodes of the DAG 18402 (or, equivalently, the client 304/306 selects one of the claims of the '011 patent). In step 16908, if the selected claim is an independent claim, then the client 304/306 creates a link from the root node to the selected node. For example, if claim 1 is the selected claim, then the client 304/306 creates a link between node 18406 to the root node 18408. Information representative of the link is stored in the parent of the selected claim. For example, information representing the link between node 18406 and the root node 18408 is stored in root node 18408. If the selected claim is a dependent claim, then in step 16908 the client 304/306 creates a link between the selected node and each node (called parent nodes) corresponding to a claim from which the selected claim depends. Information representing these links is stored in the parent nodes (Column 135, line 61 – Column 136, line 10), compare with the step of selection of the subset of elements comprises the step selected from the list consisting of: selecting the subset*

comprising only one element in one form, and displaying the selected subset in said one form with the related subset comprising the corresponding element of the other form; selecting the subset comprising only one element of in one form, and displaying the selected subset in said one form along with the related subset in the other form comprising first and second elements, wherein the first element corresponds to the selected element of the first form, and the second element is the element on which the first element refers to according to claim dependency; selecting the subset comprising elements of one form corresponding to independent claims only, and displaying the selected subset in said one form along with the related subset in the other form comprising elements of the other form corresponding to the selected elements of the said one form; selecting the subset comprising elements in one form corresponding to an independent claim and all the dependent claims referred thereto only, and displaying the selected subset in said one form along with the related subset comprising elements in the other form corresponding to the selected elements in said one form; and selecting the first subset comprising an independent claim only in one form, and displaying the selected subset in said one form along with the related subset comprising elements in the other form corresponding to the selected independent claim and all dependent claims referred thereto.

33. Regarding dependent claim 38, the claim incorporates substantially similar subject matter as claim 19, and is rejected along the same rationale.

34. **Regarding independent claim 39**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

35. **Regarding independent claim 40**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

36. **Regarding dependent claims 41 and 43**, Rivette et al. teach that *some well known hyperbolic browser implementations are capable of generating and displaying hyperbolic trees directly from DAGs. These hyperbolic browser implementations conceptually operate by mapping the root node in the DAG to the root node in the hyperbolic tree. Also, non-root nodes in DAG that have a single parent node are directly mapped to corresponding nodes in the hyperbolic tree. These hyperbolic browser implementations conceptually map non-root nodes in the DAG that have multiple parent nodes to multiple nodes in the hyperbolic tree, wherein each of these tree nodes are linked to a single parent node in the hyperbolic tree. This is shown in FIG. 179, where node D has parent nodes B and C in DAG 17902. As a result of this conceptual mapping process in hyperbolic browser, nodes 17906A and 17906B are created in the hyperbolic tree 17904. Each of these nodes 17906A and 17906B is linked to a single parent node (that is, nodes B and C) in the hyperbolic tree 17904. The process of generating and populating a hyperbolic tree from a DAG by such hyperbolic browser implementations will be apparent to persons skilled in the relevant art(s) (Column 123, line 59 – Column 124, line 12), compare with the step (b) further comprises: (i) transforming multiple dependent claims into single dependent claims; (ii) sorting the transformed claims by claim numbers to which the claims*

Art Unit: 2176

refer to; (iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements: both claims are dependent claims and refer to different claims; and succeeding claim does not refer to the preceding claim; wherein the steps (i) to (iii) are performed before the step (c) of extracting; and the step (i) further comprises one of the following: adding single dependent claims generated from multiple dependent claims to the end of original set of claims; and inserting claims generated from a multiple dependent claim into original set of claims immediately after the multiple dependent claim, followed by re-numbering of claims starting from the multiple dependent claim and to the end of claim section.

37. **Regarding dependent claim 42**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale as explained in the rejection(s) of the claim under 35 USC 112, second paragraph.

38. **Regarding dependent claim 44**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

39. **Regarding dependent claim 45**, the claim incorporates substantially similar subject matter as claim 44, and is rejected along the same rationale as explained in the rejection(s) of the claim under 35 USC 112, second paragraph.

40. **Regarding independent claim 46**, the claim incorporates substantially similar subject matter as claim 44, and is rejected along the same rationale.

41. **Regarding dependent claim 48**, the claim incorporates substantially similar subject matter as claim 41, and is rejected along the same rationale.

Art Unit: 2176

42. **Regarding dependent claim 49**, the claim incorporates substantially similar subject matter as claim 42, and is rejected along the same rationale.

43. **Regarding dependent claim 50**, the claim incorporates substantially similar subject matter as claim 41, and is rejected along the same rationale.

44. **Regarding dependent claim 51**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William L. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER
6/24/2005

NH